IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(oracle01.026)

Applicant:	Guay, et al.	**Confirmation No.:**	3882
Application No:	10/678,800	**Group Art Unit:**	2166
Filed:	10/03/2003	**Examiner:**	Navneet K. Ahluwalia

Title: *Preserving sets of information in rollup tables*

- -

Commissioner for Patents
Alexandria, VA 22313-1450

Brief for a Pre-Appeal Brief Conference

Status of the prosecution

The claims which are to form the subject matter of the Pre-Appeal Brief Conference are claims 1-8 and 25-32. Claims 25-32 are Beauregard versions of claims 1-8 and consequently stand and fall with claims 1-8. Only claims 1-8 will be discussed here. On 2/22/2007, Examiner mailed a final Office action in the above patent application in which she rejected all claims under 35 U.S.C. 103 as obvious over the combination of published US patent application 2004/0120250, Langevin, et al., *Trouble-ticket generation in network management environment*, filed 12/20/02 (henceforth "Langevin") with published US patent application 2002/0029207, Bakalash, et al., *Data aggregation server for managing a multi-dimensional database and database management system having data aggregation server integrated therein*, filed Feb. 28, 2001 (henceforth "Bakalash"). Applicants traversed the rejection in a response filed 22 April 2007 and received an Advisory Action mailed 5/4/2007 in which Examiner maintained her final rejection.

Issue

In order to reject a claim under 35 U.S.C. 103, Examiner must establish a *prima facie* case of obviousness which includes a demonstration that the combined references disclose all of the limitations of the claim under rejection. See in this regard MPEP 2142. Applicants will demonstrate in the following that the combined references do not disclose the following limitations and that Examiner has consequently not made her *prima facie* case:

OID-2002-247-01

- claim 1's "aggregated entry" which includes "a field whose value is a representation of a set that is capable of having a plurality of members" and in which the members of the set are "deriv[ed] from values contained in entries belonging to the plurality thereof"; and

- claim 2's step of "deleting the plurality of entries represented by the aggregated entry"

5

Failure of the references to disclose an "aggregated entry" with a "field whose value is a representation of a set that is capable of having a plurality of members"

In her Advisory Action, Examiner indicates that Applicants "aggregated entry" with a "field
10 whose value is a representation of a set that is capable of having a plurality of members" is disclosed in Bakalash at paragraphs 0024-0026 and Figs. 9A, 9B, 9 C1 and C2, and 10A and in Langevin at paragraphs 54 and 72.

The disclosure of Bakalash
15 Bakalash's paragraphs 0024-0026 describe FIGs. 1B, 2, and 3.   As described in paragraph 0025, FIG. 1B shows a multi-dimensional database (MDDB) into which base data is loaded by a base data loader. In the MDDB, the aggregation program from an Access, Aggregation, and Retrieval module builds up layers of aggregated data on top of the base data. The aggregated data is organized according to a number of dimensions.

20

FIG. 2B shows a three-dimensional MDDB in which each record in the MDDB has two fields: a dollar field indicating the purchase price and a units field indicating the number of units of a product purchased for the price. The dimensions in the MDDB are geography, products, and periods of time. The MDDB will return a record specifying dollars and units for each possible
25 combination of geography, products, and time. For example, if the product is a widget and 25 widgets were sold on July 20, 2005 in Cincinnati for $4.00 apiece at a total price of $100.00, the MDDB will return a record having the field values $100, 25 when {widget, July 20, 2000, Cincinnati} is specified to the MDDB. If 100 widgets were sold in all of Ohio the day of July 20, 2005, the MDDB will return a record having the field values $400, 100 when {widget, July
30 20, 2005, Ohio} is specified. If 800 widgets were sold in all of Ohio the week of July 20, 2000, the MDDB will return the field values $3200, 800) when {widget, week containing July 20, 2005, Ohio} is specified. As is apparent from the foregoing, the base data is aggregated along the various geography, time, and product dimensions of the MDDB. To speed up operation of

OID-2002-247-01

the MDDB, after the base data has been loaded into the MDDB, the aggregation module pre-aggregates the data. None of the aggregation entries, however, contains a "field whose value is a representation of a set that is capable of having a plurality of members", as required by claim 1.

5

FIGs. 9(A-C2) and 10A and the description of these figures at paragraphs 0140-0144 disclose the technique of segmented aggregation which is used in Bakalash's system to aggregate data. FIG. 10A discloses how sparse aggregated data is indexed along dimension lines. Again, there is simply no disclosure here of a "'field whose value is a representation of a set that is capable of
10   having a plurality of members". Moreover, a Lexis search of the use of the term "set" in the reference discloses many uses of the term, but no use in the mathematical sense of the term "set". It is of course that sense in which the term is used in Applicants' Specification and in claim 1.

15   The disclosure of Langevin

Langevin discloses a system for making trouble tickets that indicate faults in a network and storing the trouble tickets in a database. As shown in FIG. 1 of Langevin, when an error occurs in a remote device 34, the remote device generates a trap indicating the type, location, and time of occurrence of the error, which it passes to front end 32. Front end 32 passes the trap to auto-
20   ticket generator client 23, which determines among many other things whether it already has a record for traps of that type. As shown in FIG. 6 and explained in paragraph 0054, if client 32 determines that it does have such a record, it merely appends the location and time to that record. By so doing, Langevin avoids repeatedly generating trouble tickets for the same problem.

25

Eventually, the record produced by client 23 is passed to auto ticket generator server 24, which reads the record and uses the information to make or modify one or more trouble ticket records in ATG database 26. Flowcharts describing this process are found in FIGs. 9-12 and described at paragraphs 0065-0081. The GUI for the information that can be accessed via a trouble ticket
30   record is shown in FIGs. 13a through 13e, described at paragraphs 0082 through 0087.

How ticket generator server 24 treats the record it receives from client 23 is determined by whether there is already a record for that type of trap. If there is not, server 24 makes a new

3

trouble ticket record using the information in the record from client 23 (flowchart 12); if there is server 24 adds the information to the existing trouble ticket record, the in both cases, ticket server 24 appends the information about the traps contained in the record from client 23 to a history field in the trouble ticket record (0072); then, as described in that same paragraph, the

5   information about the traps is read to determine whether the traps originated from multiple locations; if they did, server 24 uses each individual location to query database 26 to obtain the record ID for profile information for that location; the record ID is incorporated into the trouble ticket record as secondary profile data. As a consequence of this, the secondary profile information may be retrieved via the trouble ticket.

10

FIGs. 13(a) through (e) show the GUI for accessing information contained in or accessible via a trouble ticket record in ATG database 26. As can be seen from the foregoing, the only information in the trouble ticket record which could in any way be construed as having a value which is a "representation of a set that is capable of having a plurality of members" is the

15   information about the traps that is copied to the history field of the trouble ticket record. As shown in FIG. 13e and described at paragraph 0087, history field 316 is viewed by clicking on history tab 310; as is apparent from FIG. 13e, history field 316 contains a character string value. The character string value includes the information about the traps that was received in the records from client 23 whose information is included in the trouble ticket record and also

20   includes information that was manually logged by the operator. History field 316 thus cannot be reasonably be construed to be the claim's "field whose value is a representation of a set that is capable of having a plurality of members".

Thus, neither Langevin nor Bakalash discloses the claim's "field whose value is a representation

25   of a set that is capable of having a plurality of members", the combined references do not show all of the limitations of claim 1, and Examiner has not made her *prima facie* case. Moreover, because the remaining claims are dependent either from claim 1 or from claim 25, which is a Beauregard claim based on claim 1, Examiner has not made his *prima facie* case with regard to any of the claims of the application.

30

Patentability of the dependent claims in their own rights
Additionally, the dependent claims set forth limitations which are not disclosed in the references, and are consequently patentable in their own rights over the references. Beginning
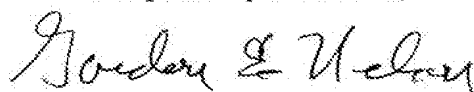
with claim 2, the added limitation is that "the plurality of entries represented by the aggregated entry [are deleted]" from their table of origin. As is apparent from the foregoing, there is no plurality of entries [in a table in a data management system (i.e., ATG database 26)]" in Langevin that are deleted when an aggregated entry is made. Further, as might be expected

5   from the purpose of Bakalash's MDDB, in the MDDB, the aggregated entries are *added to* the entries for the base data; nothing is deleted when an aggregated entry is made. Thus, neither reference shows the limitation of claim 2 and the claim is patentable in its own right over the references.

10   Claims 3-8 are all directed to limitations involving the representation of the set and the kinds of values the represented set contains. As set forth above, neither Bakalash nor Langevin discloses any "field whose value is a representation of a set" and consequently neither reference can disclose the additional limitations of claims 3-8. As Examiner will immediately see, the same is true with regard to claims 26-32, which parallel claims 2-8.

15

Conclusion

Applicants have demonstrated that Examiner's rejections as set forth in her Advisory Action of 5/4/2007 are without foundation. Applicants consequently respectfully request that the Conferees allow the claims presently in the application or failing that, at least reopen

20   prosecution. A Notice of Appeal and the requisite fee of $500.00 and a petition for a 1-month extension of time and the requisite fee of $120.00 accompany this response. If any additional fees are required, please charge them to deposit account number 501315. Any overpayments should be credited to that account.

25   Respectfully submitted,

                                                     [signature]

                                                     Attorney of record,
                                                     Gordon E. Nelson
                                                     57 Central St., P.O. Box 782
30   Rowley, MA, 01969,
                                                     Registration number 30,093
                                                     Voice: (978) 948-7632
                                                     Fax: (866) 723-0359
                                                     ____6/21/2007____
35   Date

OID-2002-247-01